Complete Summary

GUIDELINE TITLE

Treatment of childhood overweight.

BIBLIOGRAPHIC SOURCE(S)

Michigan Quality Improvement Consortium. Treatment of childhood overweight. Southfield (MI): Michigan Quality Improvement Consortium; 2006 Nov. 1 p.

GUIDELINE STATUS

This is the current release of the guideline.

COMPLETE SUMMARY CONTENT

SCOPE

DISEASE/CONDITION(S)

- Overweight
- Obesity

GUIDELINE CATEGORY

Evaluation
Management
Prevention
Treatment

CLINICAL SPECIALTY

Family Practice
Internal Medicine

Nutrition
Pediatrics

INTENDED USERS

Advanced Practice Nurses
Health Plans
Physician Assistants
Physicians

GUIDELINE OBJECTIVE(S)

- To achieve significant, measurable improvements in the specific treatment of childhood overweight and obesity through the development and implementation of common evidence-based clinical practice guidelines
- To design concise guidelines that are focused on key management components of childhood overweight to improve outcomes

TARGET POPULATION

Children 2 years of age or older with body mass index (BMI) in the following ranges:

- BMI ≥ 85th percentile
- BMI ≥ 85th to 94th percentile without complication ("at risk for overweight")
- BMI ≥ 85th to 94th percentile with complication
- BMI ≥ 95th percentile with or without complication

INTERVENTIONS AND PRACTICES CONSIDERED

Evaluation/Prevention

1. Reinforcement of prevention recommendations
2. History including family history; co-morbidities (e.g., cardiovascular disease, diabetes); history of medication use; patient and parent concern about weight
3. Physical exam including blood pressure, skin problems, weight-related orthopedic problems, secondary causes of obesity
4. Screening for insulin resistance or type 2 diabetes mellitus

Management/Treatment

1. Interventions to promote weight management including lifestyle and behavior modifications, family involvement, gradual changes towards the stated goal, monitoring for increase in body mass index (BMI) and development of complications
2. Regulation of body weight and fat with adequate nutrition for growth and development
3. Treatment of complications as needed
4. Small but consistent changes in energy intake, expenditure, or both
5. Referral to multidisciplinary pediatric obesity treatment center, pediatric endocrinologist or registered dietitian

6. Considering aggressive approach to weight loss and treatment for severely overweight patients after conservative approaches have failed

MAJOR OUTCOMES CONSIDERED

Not stated

METHODOLOGY

METHODS USED TO COLLECT/SELECT EVIDENCE

Searches of Electronic Databases

DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

The Michigan Quality Improvement Consortium (MQIC) project leader conducts a search of current literature in support of the guideline topic. Computer database searches are used to identify published studies and existing protocols and/or clinical practice guidelines on the selected topic. A database such as MEDLINE and two to three other databases are used.

NUMBER OF SOURCE DOCUMENTS

Not stated

METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Weighting According to a Rating Scheme (Scheme Given)

RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

Levels of Evidence for the Most Significant Recommendations

A. Randomized controlled trials
B. Controlled trials, no randomization
C. Observational studies
D. Opinion of expert panel

METHODS USED TO ANALYZE THE EVIDENCE

Review

DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

Not stated

METHODS USED TO FORMULATE THE RECOMMENDATIONS

Expert Consensus

DESCRIPTION OF METHODS USED TO FORMULATE THE RECOMMENDATIONS

Using the health plan guideline summaries and information obtained from the literature search, the Michigan Quality Improvement Consortium (MQIC) director and/or project leader prepare a draft guideline for review by the MQIC Medical Directors.

The draft guideline and health plan guideline summaries are distributed to the MQIC Medical Directors for review and discussion at their next committee meeting.

The review/revision cycle may be conducted over several meetings before consensus is reached. Each version of the draft guideline is distributed to the MQIC Medical Directors, Measurement, and Implementation Committee members for review and comments. All feedback received is distributed to the entire membership.

Once the MQIC Medical Directors achieve consensus on the draft guideline, it is considered approved for external distribution to practitioners with review and comments requested.

RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

Not applicable

COST ANALYSIS

A formal cost analysis was not performed and published cost analyses were not reviewed.

METHOD OF GUIDELINE VALIDATION

External Peer Review
Internal Peer Review

DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

Once the Michigan Quality Improvement Consortium (MQIC) Medical Directors achieve consensus on the draft guideline, it is considered approved for external distribution to practitioners with review and comments requested.

The MQIC director also forwards the approved guideline draft to presidents of the appropriate state medical specialty societies for their input. All feedback received from external reviews is presented for discussion at the next MQIC Medical Directors Committee meeting. In addition, physicians are invited to attend the committee meeting to present their comments.

RECOMMENDATIONS

MAJOR RECOMMENDATIONS

The level of evidence grades (A-D) are provided for the most significant recommendations and are defined at the end of the "Major Recommendations" field.

Children 2 Years or Older with a Body Mass Index (BMI) ≥ 85th Percentile

Identify Presence of Weight Related Complications

Reinforce Prevention Recommendations (See also Michigan Quality Improvement Consortium (MQIC) Prevention and Identification of Childhood Overweight & Obesity Guideline)

History and Physical Exam **[D]**:

- Family history, evaluate general co-morbidities including but not limited to cardiovascular disease and diabetes
- Symptoms of gallbladder disease, Type 2 diabetes, obstructive sleep disorders, hypothyroidism
- History of medication use including nutritional supplements
- Patient/parental concern about weight
- Blood pressure, using appropriate technique and cuff size for age
- Skin problems, especially presence of acanthosis nigricans
- Weight related orthopedic problems
- Be alert to secondary causes of obesity. If aberrant findings are noted (short stature, hypotonia, hirsutism, etc.) then consider genetic and other endogenous causes of obesity.
- Consider screening for insulin resistance or type 2 diabetes mellitus (DM) with a fasting glucose and insulin level. **[D]**

Frequency: Each periodic health exam, more frequently as case requires.

Children 2 Years or Older with a BMI ≥ 85th – 94th Percentile without Complication ("At risk for overweight")

Lifestyle Intervention to Reach Weight Maintenance

Consider all of the above plus:

Intervention to promote weight management/treatment **[D]**:

- Reinforce lifestyle intervention/behavior modification. Focus is appropriate weight maintenance
- Family must be involved; small gradual changes are recommended towards the stated goal
- Monitor for increasing BMI percentile
- Monitor for the development of complications/co-morbidities

Frequency: Consider management of childhood obesity as a medium to long-term intervention.

Children 2 Years or Older with a BMI ≥ 85th – 94th Percentile with Complication

Lifestyle Intervention with Concomitant Treatment of Complication as Needed

All of the above plus:

- Primary goal of childhood weight interventions is regulation of body weight and fat with adequate nutrition for growth and development
- Treat complications as needed
- Substantial slowing of weight gain may be achieved by relatively small but consistent changes in energy (200–500 kcal/day) intake, expenditure or both. If weight loss is desired, an appropriate starting goal is about 1 lb of weight loss per month
- Consider referral to multidisciplinary pediatric obesity treatment center/pediatric endocrinologist/registered dietitian

Frequency: Consider management of childhood obesity as a medium- to long-term intervention.

Children 2 Years or Older with a BMI ≥ 95th Percentile, with or without Complication

Weight Loss with Concomitant Treatment of Complications as Needed

All of the above plus:

- Long-term goal should be a body mass index below 85th percentile for age and sex
- Consider aggressive approach to weight loss and treatment for severely overweight patients after conservative approaches have failed

Frequency: Consider management of childhood obesity as a medium to long-term intervention.

Definitions:

Levels of Evidence for the Most Significant Recommendation

A. Randomized controlled trials
B. Controlled trials, no randomization
C. Observational studies
D. Opinion of expert panel

CLINICAL ALGORITHM(S)

None provided

EVIDENCE SUPPORTING THE RECOMMENDATIONS

TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The type of evidence is provided for the most significant recommendations (see "Major Recommendations" field).

This guideline is based on several sources, including: Committee on Nutrition. 2003. American Academy of Pediatrics Policy Statement: Prevention of Pediatric Overweight and Obesity (www.aap.org).

BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

POTENTIAL BENEFITS

Through a collaborative approach to developing and implementing common clinical practice guidelines and performance measures for specific treatment interventions for childhood overweight and obesity, Michigan health plans will achieve consistent delivery of evidence-based services and better health outcomes. This approach also will augment the practice environment for physicians by reducing the administrative burdens imposed by compliance with diverse health plan guidelines and associated requirements.

POTENTIAL HARMS

Not stated

QUALIFYING STATEMENTS

QUALIFYING STATEMENTS

This guideline lists core management steps. Individual patient considerations and advances in medical science may supersede or modify these recommendations.

IMPLEMENTATION OF THE GUIDELINE

DESCRIPTION OF IMPLEMENTATION STRATEGY

When consensus is reached on a final version of the guideline, a statewide mailing of the approved guideline is completed. The guideline is distributed to physicians in the following medical specialties:

- Family Practice
- General Practice
- Internal Medicine
- Other Specialists for which the guideline is applicable (e.g., endocrinologists, allergists, pediatricians, cardiologists)

INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

IOM CARE NEED

Getting Better
Living with Illness
Staying Healthy

IOM DOMAIN

Effectiveness

IDENTIFYING INFORMATION AND AVAILABILITY

BIBLIOGRAPHIC SOURCE(S)

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ADAPTATION

This guideline is based on the Committee on Nutrition. 2003. American Academy of Pediatrics Policy Statement: Prevention of Pediatric Overweight and Obesity (www.aap.org).

DATE RELEASED

2006 Nov

GUIDELINE DEVELOPER(S)

Michigan Quality Improvement Consortium - Professional Association

SOURCE(S) OF FUNDING

Michigan Quality Improvement Consortium

GUIDELINE COMMITTEE

Michigan Quality Improvement Consortium Medical Director's Committee

COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE

Physician representatives from participating Michigan Quality Improvement Consortium health plans, Michigan State Medical Society, Michigan Osteopathic Association, Michigan Association of Health Plans, Michigan Department of Community Health and Michigan Peer Review Organization

FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

Not stated

GUIDELINE STATUS

This is the current release of the guideline.

GUIDELINE AVAILABILITY

Electronic copies: Available in Portable Document Format (PDF) from the Michigan Quality Improvement Consortium Web site.

AVAILABILITY OF COMPANION DOCUMENTS

None available

PATIENT RESOURCES

None available

NGC STATUS

This NGC summary was completed by ECRI Institute on July 13, 2007. The information was verified by the guideline developer on July 16, 2007.

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Readers with questions regarding guideline content are directed to contact the guideline developer.

Date Modified: 9/29/2008